

REMARKS/ARGUMENTS

The claims are 69-81, 83-94, 124-127, 129-133, 135-146 and 161-165, with claims 99-109, 134, 147-160, 166-178 and 180-204 having been withdrawn from consideration by the Examiner as directed to a non-elected species. Claim 69 was amended to correct a spelling error. Claims 81, 83-86, 124-126, 130, 132 and 162 were amended to improve their form or to better define the invention. Claim 124 was also amended to be an independent claim, and accordingly claim 122 on which claim 124 depended has been canceled. Claim 125 was also amended to incorporate the subject matter of claim 128, and accordingly, claim 128 has been canceled. Claims 82, 95-98, 110-121, 123, and 179 have also been canceled. Support may be found, *inter alia*, in the disclosure at pages 6-7, 19-23, 29, 36 and 44. Reconsideration is expressly requested.

Claims 81-89, 115-121, 124-133 and 162 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the reasons set forth on pages 3-4 of the Office Action. In response, Applicants have, *inter alia*, canceled claims 82, 115-121, and 128 and have amended claims 81, 83-86, 124-126, 130, 132

and 162 to improve their form, which it is respectfully submitted overcomes the Examiner's rejection under 35 U.S.C. 112, second paragraph.

The Examiner indicated that claims 69-80, 90-94 and 164-165 are allowed, and that claim 81 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in the Office Action. As claim 81 has been amended to improve its form, it is respectfully submitted that claims 69-81, 90-94 and 164-165 are now in condition for allowance.

The remaining claims under consideration by the Examiner, however, were rejected on the basis of the prior art. Specifically, claims 83-85 and 87-89 were rejected under 35 U.S.C. 102(b) as being anticipated by *Schmid et al. U.S. Patent No. 6,506,136*. Claims 83-86 and 162 were rejected under 35 U.S.C. 102(b) as being anticipated by *Herscovici U.S. Patent No. 5,073,157*. Claims 95-98 were rejected under 35 U.S.C. 102(b) as being anticipated by *Stoeckicht U.S. Patent No. 1,868,676*. Claims 110-113 and 115-120 were rejected under 35 U.S.C. 102(b) as being anticipated by *Haidegger U.S. Patent No. 2,545,152*.

Claims 110-121 were rejected under 35 U.S.C. 102(b) as being anticipated by *Wedeniowski U.S. Patent No. 5,984,820*. Claims 122 and 124 were rejected under 35 U.S.C. 102(b) as being anticipated by *Bignon FR 2 796 693*. Claims 125-129 and 132-133 were rejected under 35 U.S.C. 102(e) as being anticipated by *Miyata U.S. Patent No. 7,077,777*. Claims 125, 130 and 179 were rejected under 35 U.S.C. 102(b) as being anticipated by *Nobumoto U.S. Patent No. 5,213,011*. Claims 135-144 were rejected under 35 U.S.C. 102(b) as being anticipated by *Holliday U.S. Patent No. 6,139,465*. Claims 161 and 163 were rejected under 35 U.S.C. 102(b) as being anticipated by *Rohs U.S. Patent No. 6,093,131*.

In addition, claims 123 and 131 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Bignon* in view of *Stoeckicht*. Claims 145-146 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Holliday* in view of *Rohs '131*.

In response, Applicants have, *inter alia*, canceled claims 95-98, 110-123, and 179, thereby obviating the Examiner's rejection on the basis of *Haidegger* and *Wedeniowski*. With respect to the remaining rejections, Applicants respectfully traverse for the following reasons.

As set forth in claim 83 as amended, Applicants' invention provides a transmission having two cones as revolving transmission elements, each of which has at least one running surface for a revolving ring as a revolving coupling element.

The at least one running surface has at least two running paths for the coupling element having different running radii. The ring surrounds one of the cones and passes through a constant gap between the transmission elements. Thus, claim 83, as amended, is strictly directed to a friction ring cone gear and its special problems.

Schmid et al. fails to disclose or suggest a friction ring cone gear. Rather, *Schmid et al.* is directed to a continuously variable transmission with a belt or chain. In addition, both *Schmid et al.* as well as *Herscovici et al.* are directed to a system that is completely different from Applicants' transmission as recited in claim 83 as amended, because the ring belt or chain does not pass through a constant gap between the cones as recited in Applicants' claim 83 as amended. Thus, it is respectfully submitted that neither *Schmid et al.* nor *Herscovici et al.* anticipates or renders obvious Applicants' transmission as

recited in claim 83 as amended, or claims 84-89, which depend thereon.

Claim 162 has been amended, similarly to claim 83, so as to be directed to a transmission having two cones as revolving transmission elements with a ring surrounding one of the cones and passing through a constant gap between the transmission elements. As discussed above, *Herscovici et al.* is directed to a completely different system because the ring does not pass through a constant gap between the cones, and therefore it is respectfully submitted cannot provide even a hint to solve the problems with friction ring cone gears. Accordingly, it is respectfully submitted that claim 162 as amended is patentable as well.

As set forth in claim 124 as amended, Applicants' invention is directed to a revolving transmission including at least first and second parallel partial transmissions, which may be switched alternately into a transmission path. The first partial transmission includes a continuously variable transmission with at least two revolving transmission elements, and the transmission path further includes a third partial transmission

in series with and following after the first and second partial transmissions in a direction from engine to wheels.

It is respectfully submitted that neither *Bignon* nor *Stoeckicht* discloses or suggests any continuously variable transmission (CVT) or friction ring cone gear with two transmission paths being parallel and with one of the two partial transmission paths including a CVT or a friction ring cone gear. Although *Bignon* discloses a reverse gear with a differential gear, this disclosure is only with respect to the state of the art, not the solution that *Bignon* advocates. Accordingly, *Bignon* teaches away from Applicants' revolving transmission as recited in claim 124 as amended.

As set forth in claim 125 as amended, Applicants' invention provides a revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally in at least first and second transmission stages, which may be switched alternately into a transmission path via a switching gear part. The first transmission stage includes a continuously variable transmission with the two transmission elements, which may transmit a torque frictionally. The second transmission stage includes a differential gear element.

It is respectfully submitted that the Examiner's arguments with respect to *Miyata* and *Nobumoto* are not persuasive because with Applicants' revolving transmission as recited in claim 125 as amended, both of the two transmission stages may be switched alternately into the transmission path. As recited in claim 125 as amended, moreover, the differential gear element 23 is part of the second transmission stage. Thus, the differential gear of *Miyata* is not within the second transmission stage because this element is always within the transmission path and may not be switched at any time.

Similarly, there is no disclosure or suggestion in *Nobumoto* of the second transmission stage including a differential gear element as recited in claim 125 as amended.

Accordingly, it is respectfully submitted that claim 125 as amended, together with claims 126-127 and 129-133, which depend directly or indirectly thereon, are patentable over the cited references.

As set forth in claim 135, Applicants' invention provides a revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally via a coupling

element. The coupling element surrounds at least one of the revolving transmission elements, and the coupling element is positionable at different running paths of at least one of the revolving transmission elements. The running paths of at least one revolving transmission element have different surfaces.

It is respectfully submitted that the Examiner's argument with respect to *Holliday* is unfounded because there is no disclosure or suggestion in *Holliday* of any running paths of at least one revolving transmission element having different surfaces as recited in claim 135. *Holliday* discloses revolving transmission elements with different running paths, because the coupling element may be positioned at different positions defining different running paths; however, the running paths of *Holliday* on one revolving transmission element have identical surfaces (see column 6, lines 36 to 38 of *Holliday*). Therefore, they do not have different surfaces as recited in claim 135.

Accordingly, it is respectfully submitted that claim 135 is patentable over the cited references together with claims 136-141, which depend directly or indirectly thereon.

As set forth in claim 142, Applicants' invention provides a revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally via a coupling element. The coupling element surrounds at least one of the revolving transmission elements and is positionable at different running paths of at least one of the revolving transmission elements. The coupling element has at least one running surface having a textured surface particularly one running surface having grooves.

Contrary to the Examiner's position, *Holliday* fails to disclose or suggest a revolving transmission having at least two revolving transmission elements which may transmit a torque frictionally via a coupling element, wherein the coupling element has at least one running surface having a textured surface. *Holliday* discloses a revolving transmission with grooves and teeth in FIGS. 3, 5 and 7, providing for a positive-locking fit, but not a frictional fit enabling a frictional torque transmission as recited in Applicants' claim 142. FIGS. 1, 2 and 4 of *Holliday* disclose a revolving transmission with a frictional surface; however, there is no disclosure or suggestion of any texturing as recited in claim 142.

As there is no disclosure or suggestion in *Holliday* of combining two different solutions that are discussed, it is respectfully submitted that claim 142 is patentable over *Holliday* together with claim 143, which depends thereon.

The same arguments apply with respect to Applicants' claim 144, which specifies the coupling element has at least one running surface having a cross-section deviating from a straight line, preferably having a concave and/or crown cross section. As stated above, there is no disclosure or suggestion in *Holliday* of a revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally via a coupling element having at least one running surface having a cross-section deviating from a straight line. The revolving transmission with grooves and teeth of FIGS. 3, 5 and 7 of *Holliday* provide for a positive-locking fit, but not a frictional fit enabling a frictional torque transmission, and FIGS. 1, 2 and 4 of *Holliday* disclose a revolving transmission with a frictional surface but no disclosure or suggestion of any cross-section at all.

The defects and deficiencies of the primary reference to *Holliday* are nowhere remedied by the secondary reference to

Rohs '131 as there is no disclosure or suggestion in *Rohs* '131 of a revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally by a coupling element, where the coupling element has at least one running surface having a cross-section deviating from a straight line.

Accordingly, it is respectfully submitted that claim 144, together with claims 145-146 are patentable over the cited references.

As set forth in claims 161 and 163, Applicants' invention provides a transmission having two revolving transmission elements each of which has at least one running surface for a revolving coupling element. The at least one running surface has at least two running paths for the coupling element having different running radii. The transmission includes a holding device for positioning the coupling element at the running radii.

It is respectfully submitted that *Rohs* '131 cannot anticipate or render obvious Applicants' invention as recited in claims 161 and 163 as there is no disclosure or suggestion of a

stationary holding device as recited in Applicants' claims 161 and 163. Although the Examiner has relied on a "wall" in *Rohs '131*, as acting a stationary holding device, it is respectfully submitted that this wall is nothing more than a wall of a casing and cannot function to act as recited in Applicants' claims 161 and 163, as claims 161 and 163 define the stationary holding device as holding the coupling element in a running path.

A wall of the casing of *Rohs '131* is not able to hold a coupling element in a running path because the coupling element or ring of *Rohs '131* will have to leave the surface of the cone when it wants to come into contact with a wall of the casing. A destruction of the gear follows, so that the ring will not be held in a running path.

Accordingly, it is respectfully submitted that claims 161 and 163 are patentable over the cited references.

In summary, claims 69, 81, 83-86, 124-126, 130, 132 and 162 have been amended, and claims 82, 95-98, 110-123, 128 and 179 have been canceled. In view of the foregoing, it is respectfully requested that the claims be allowed and that this case be passed to issue.

Applicants also submit herewith a Supplemental Information Disclosure Statement.

Respectfully submitted,
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Enclosures: Petition - 3 month extension of time
Supplemental Information Disclosure Statement

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 31, 2008.

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